

FIG. 1

CATAAATCAGCAGCAGCTACTAACACTCAAGCAATGCTTCAGGTTGGAACTAATACCTCAGAGGCAGC
TGGTGTGAACATGCAAACACGGATTACGCTCCAGTGGCACAGCAGCCACTAGGAAATTAATTTTGAAAAG
ACCTGACTGAATGCCCTCAGGCTAAAGTTAAGGTGAAGGAGGACAGAAAGCAAAAGAGCAGACTCTTT
CAACTGAGAATGATATTTCAGAAAGCCTAAGATTTACAAATGAAGGTGATCAGAGCCGTTCTGGGAGACA
GTAAAACTCCATTTCAGCCTGGGAGCACGTGACATTTACTCACAAACAGGCATGCCAATTTACGCTCAN
AACTTTCGGCAGACAAAGGCGTGGAGAAACACTGAGGCTACCTGACCCGAGAGATCGAATCAATTCC
GAGGGATCTGAATCCACTGGTGCAGGATGAATCCACTCATCACCATGGAATGCACACTTCTCTCCACTT
CTGGAACCGCAGCACCTACGGACCGCACAGCAATGCCAGTGAGTCCCTTGGAAAGGCTACTCTGATGGA
GGGTGTATGAGCAACTTTTGTCTCCCTGAGGTGTTGTGACTCTGGGTGTCATCAGCTTGTGGAGAAAT
ATTCTGGTGATTGTGGCAATAGCCAAGAACAAACCTGCATTCGCCCATGTACTTTTTCATCTGCAGCCTG
GCTGTGGCTGATATGTTGTGAGCGGTGTCAAACGGATCCGAAACCATTTGTATCACCCTATTAAACAGTACA
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GCATCGATTTCAGCCTGCTCTCAATTGCAGTGACAGGTACTTTACTATCTTTTATGCTCTCCAGTACCAATA
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CATGGCCTCTCTATGTCCACATGTTCTCATGGCCAGACTGCACATTAAGAGAAATTGCTGTCTCCCGG
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CCGGAGCCAAAGAACTAAGGAAACCTTCAAAGAGATCATCTGTGCTATCTCTTAGGGCGCCTCTGTGATT
TGCTAGCAGATACTAATGTGCAGATAGAAACGTGCATAAGACTTCTTCATCTTACAGAACCCGGAACA
TTGTGCTTTGATGACCTTTTCTCTCTGTGTAAAGGCATGGGTTGAGACTATCTGTTGTATAAATTAAAGTTC
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TGCACTGGGCGGCTTGCA CGGTGCAGGCATCTTGTTCACTCATTTACTCGGACAGTACTGCTGTCTCATCATCTGCC
TCATCACCATGTTCTTCAACCATGCTGGCCCTCATGGCTTCTCTCTACGTCCACATGTTCTCTCATGGCCAGACTGCA
CATCAAGAGAAATCGCCGTCTCCCGGGCACCGGCACCATCCGCCAAGGGGCCAACATGAAGGTGCCATTACCT
TGACCATACTCAATTGGGGTCTTCGTCTGCTGGGCTCCATTTCTCTCCCTCCACTTGATATTCTACATCTCTGTCCC
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FIG. 3

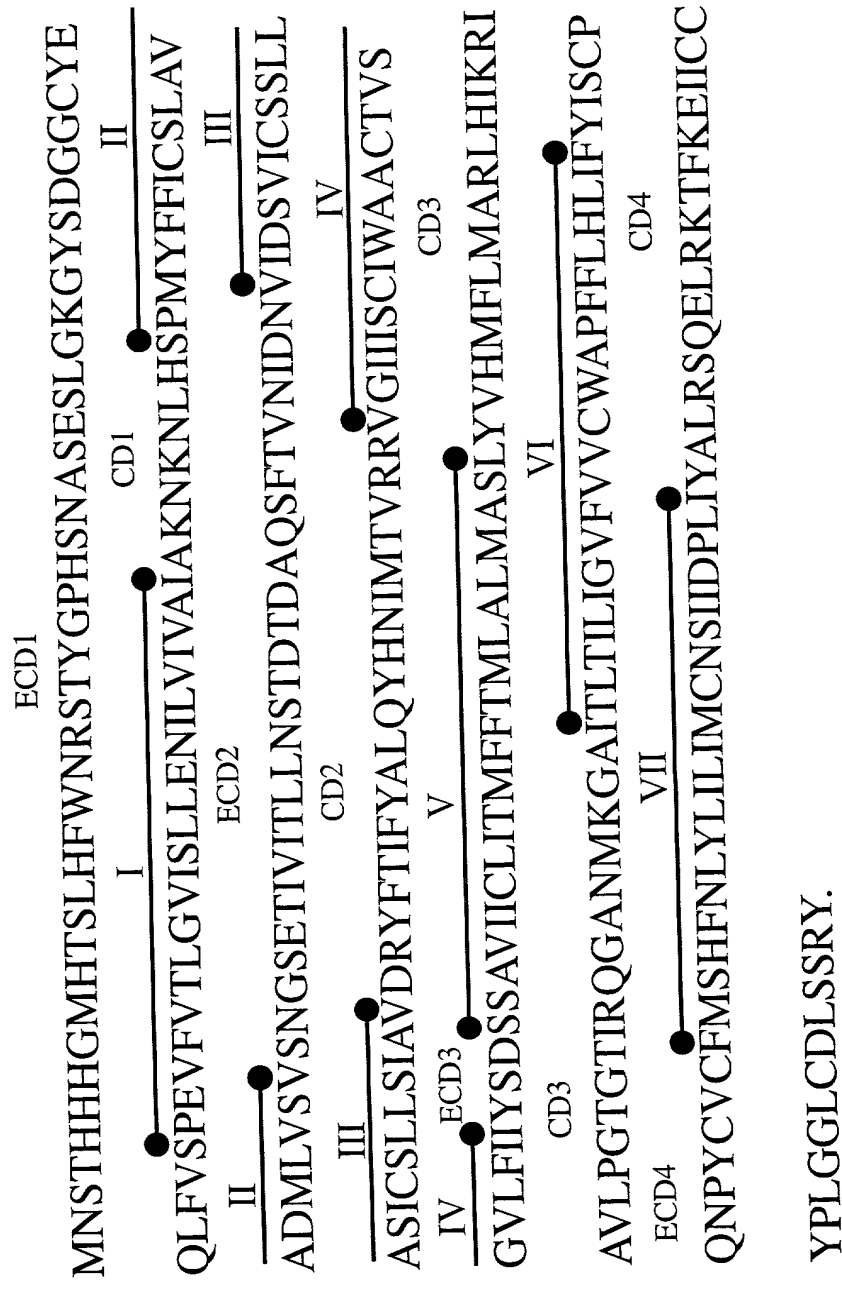


FIG. 4

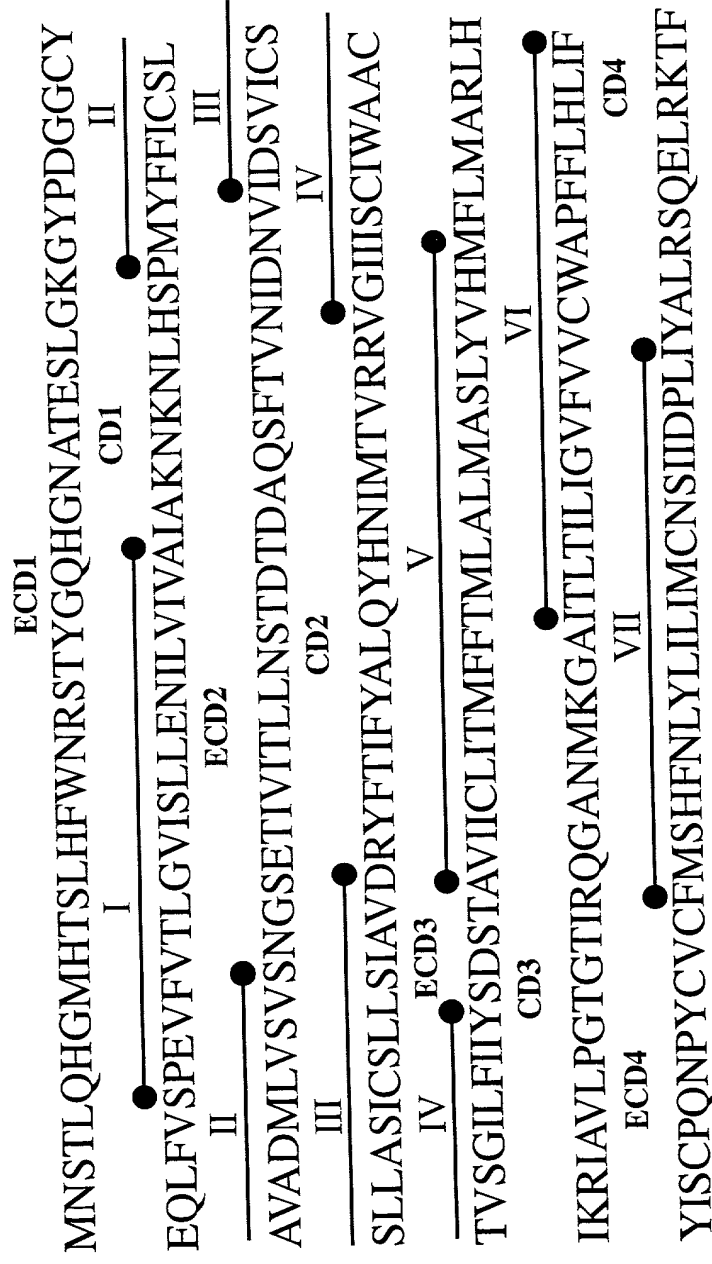


FIG. 5

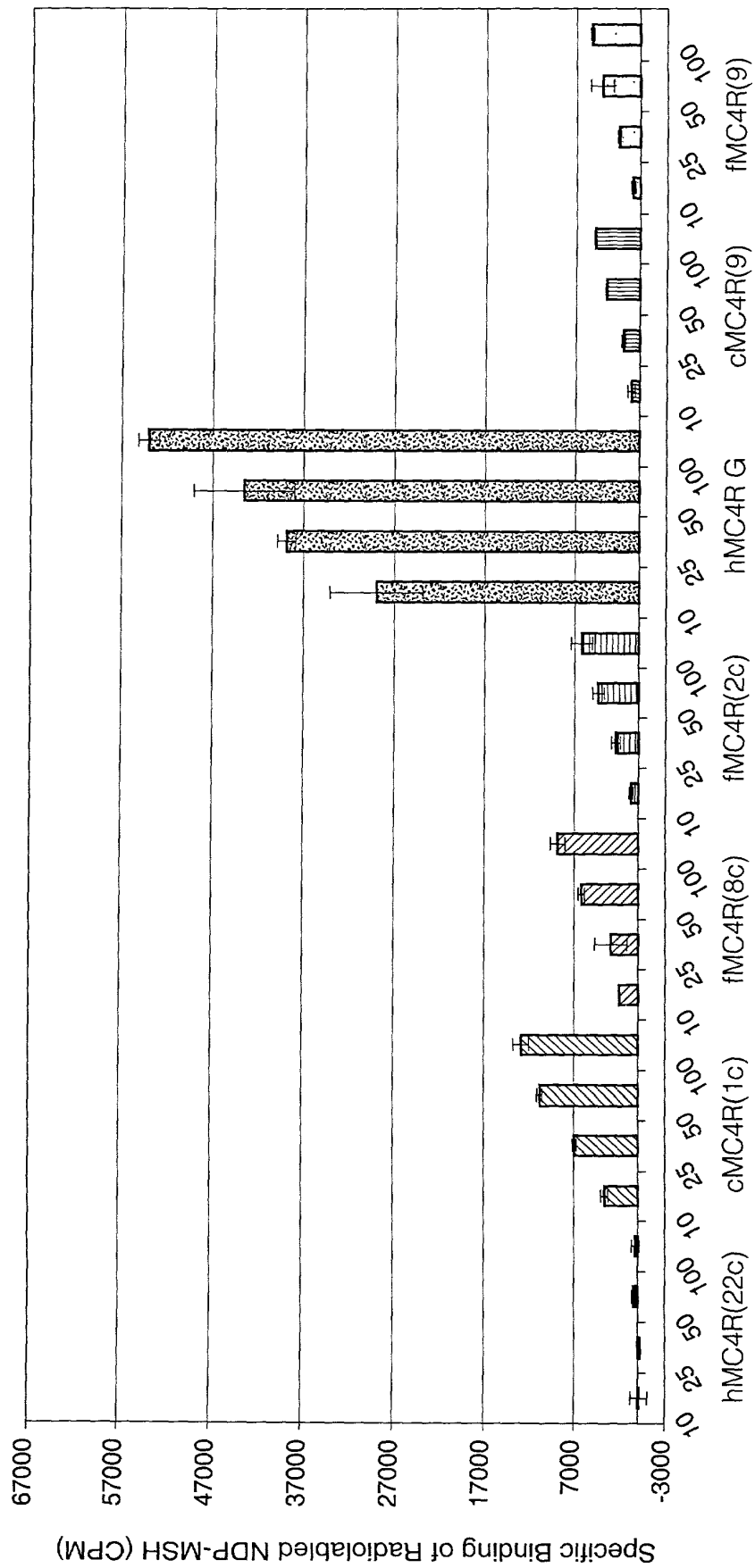


FIG. 6

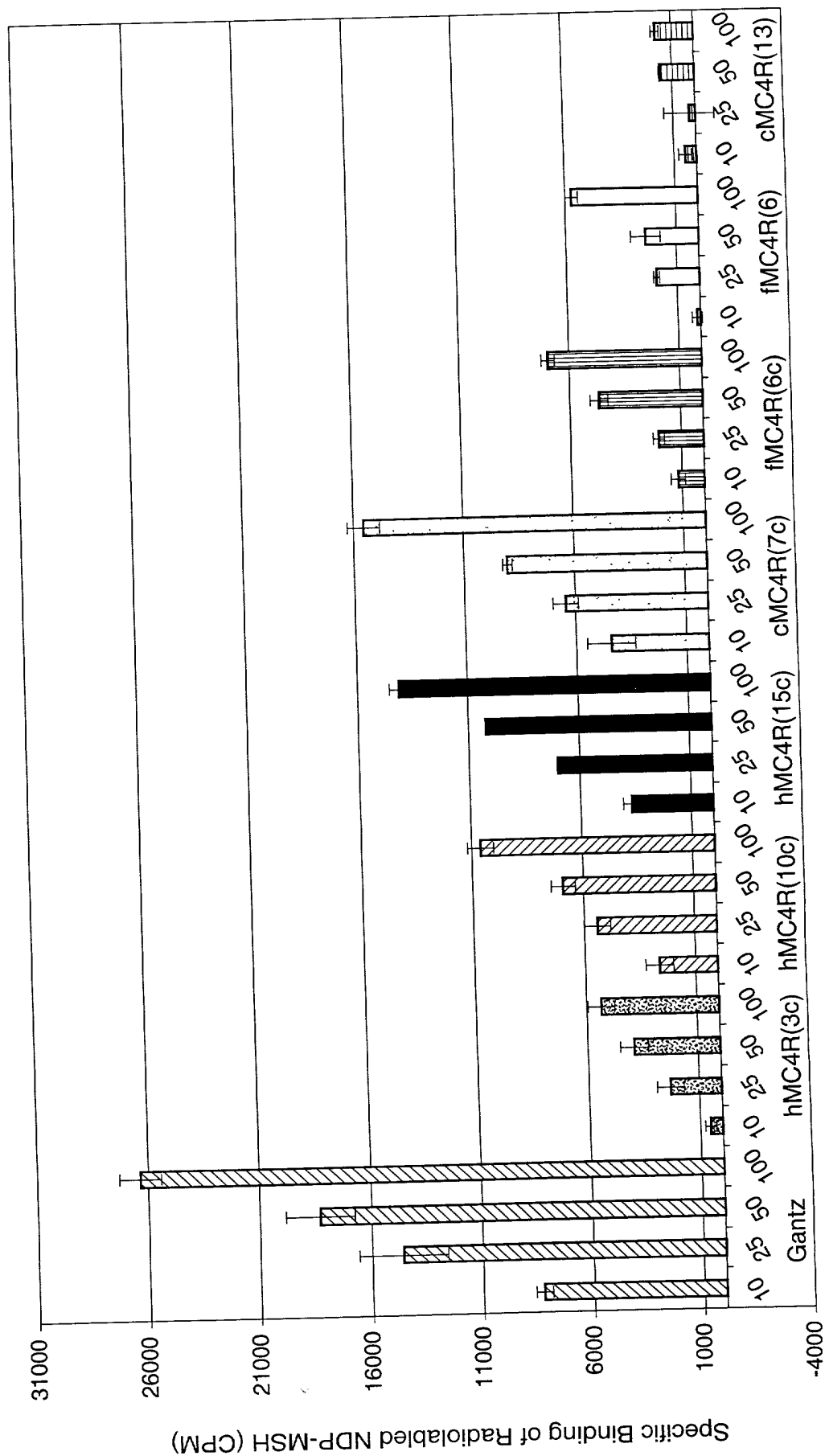


FIG. 7

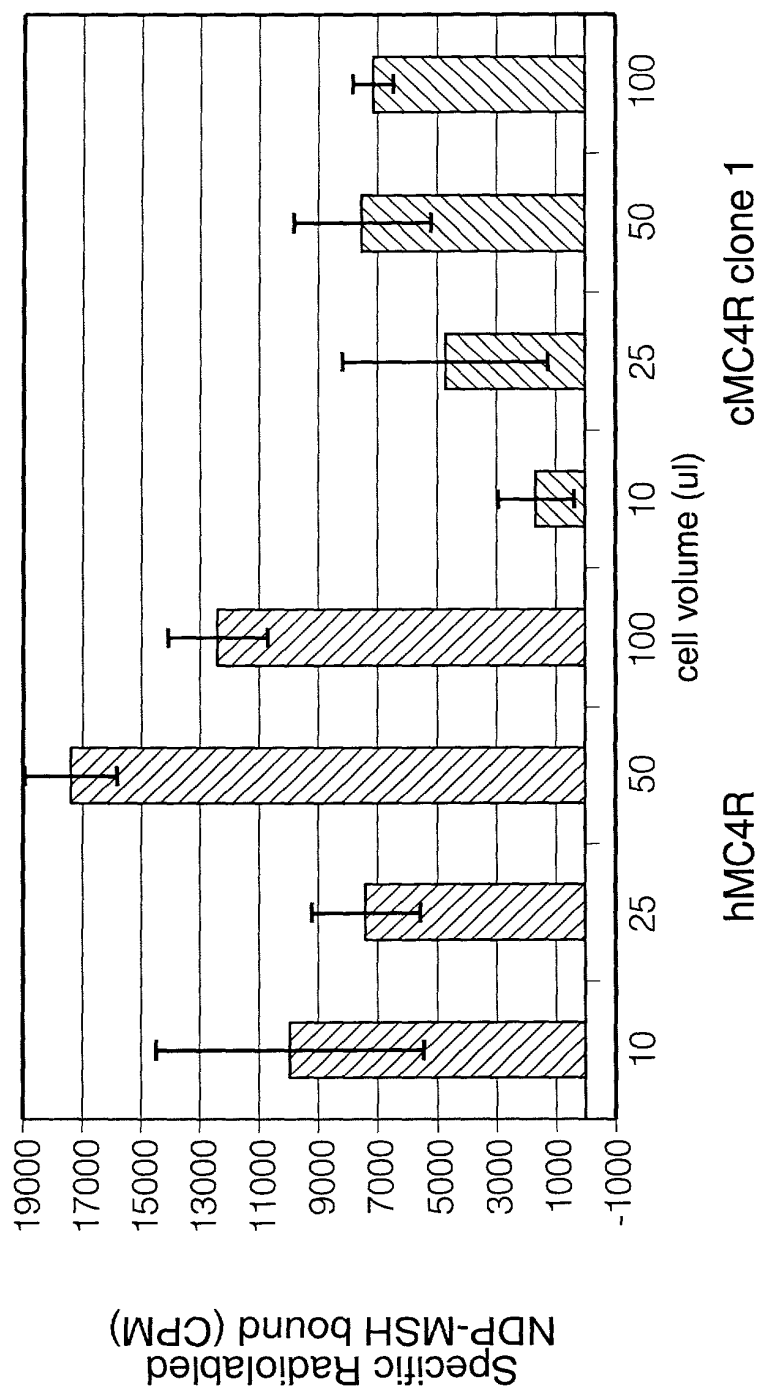


FIG. 8A

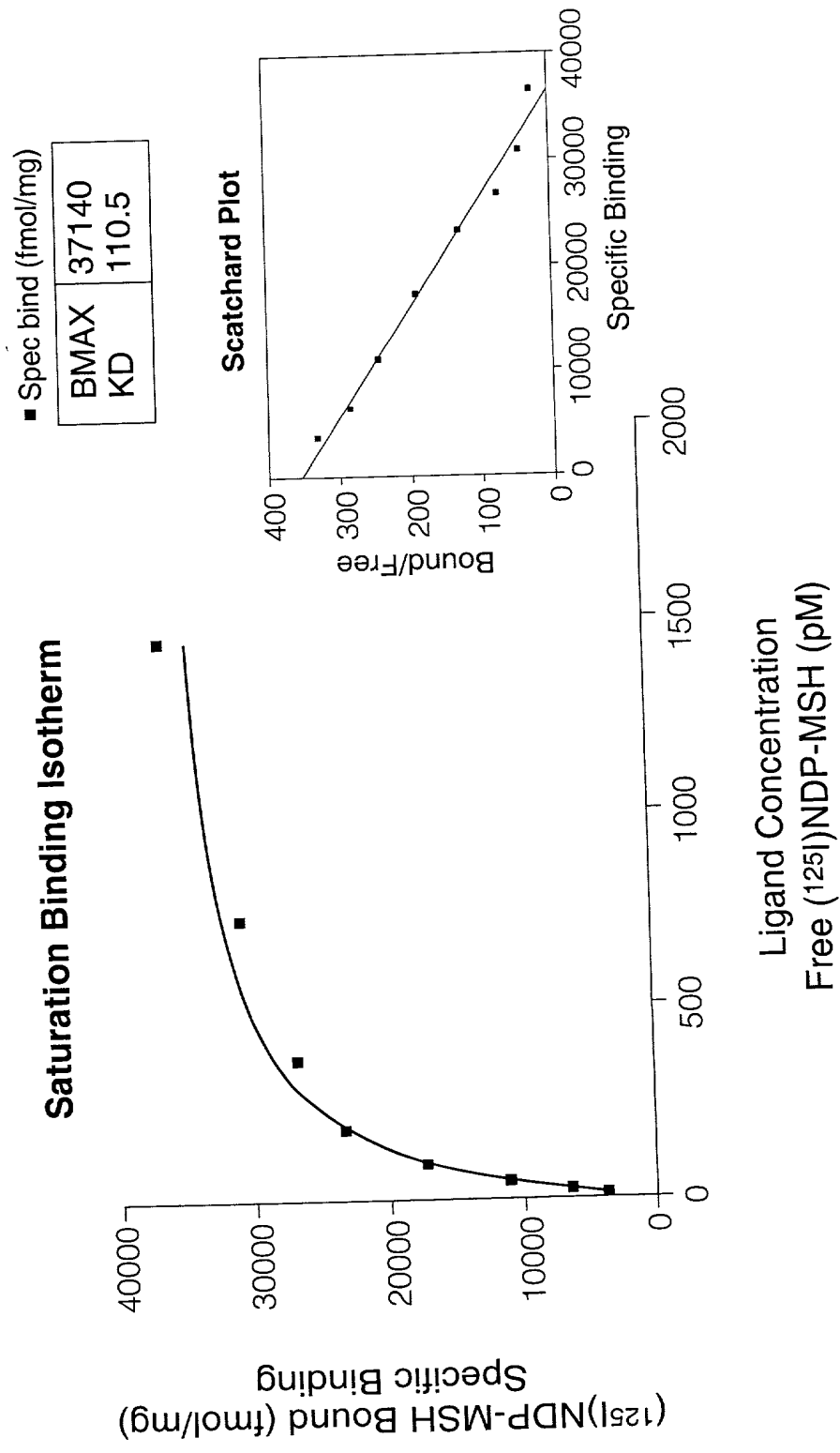


FIG. 8B

**Saturation Binding Isotherm for Radiolabelled
NDP-MSH Binding to hMC3R/293 membrane**

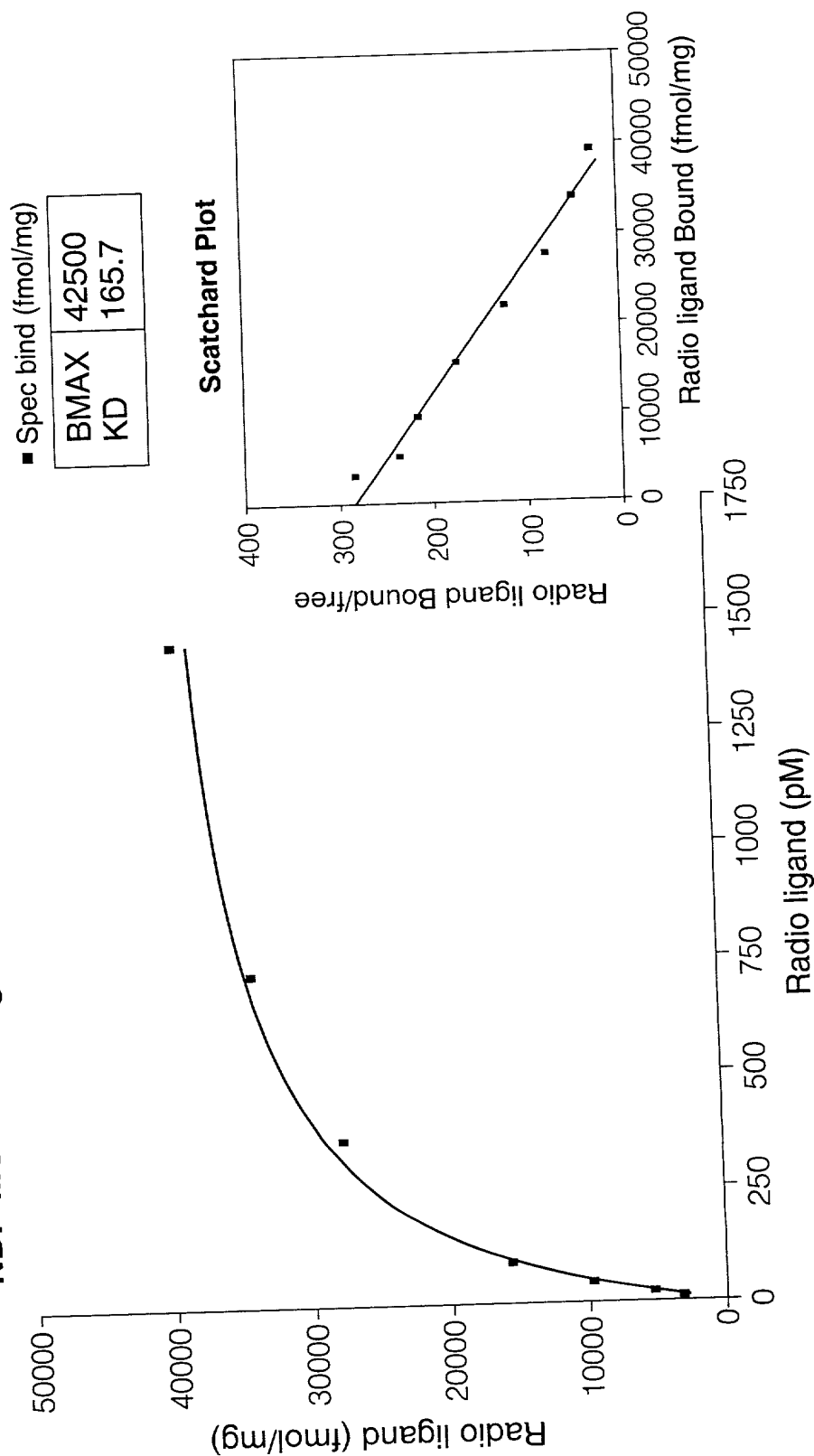


FIG. 8C

Saturation Binding Isotherm for Radiolabelled
NDP-MSH binding to cMC4R C1/293 membrane

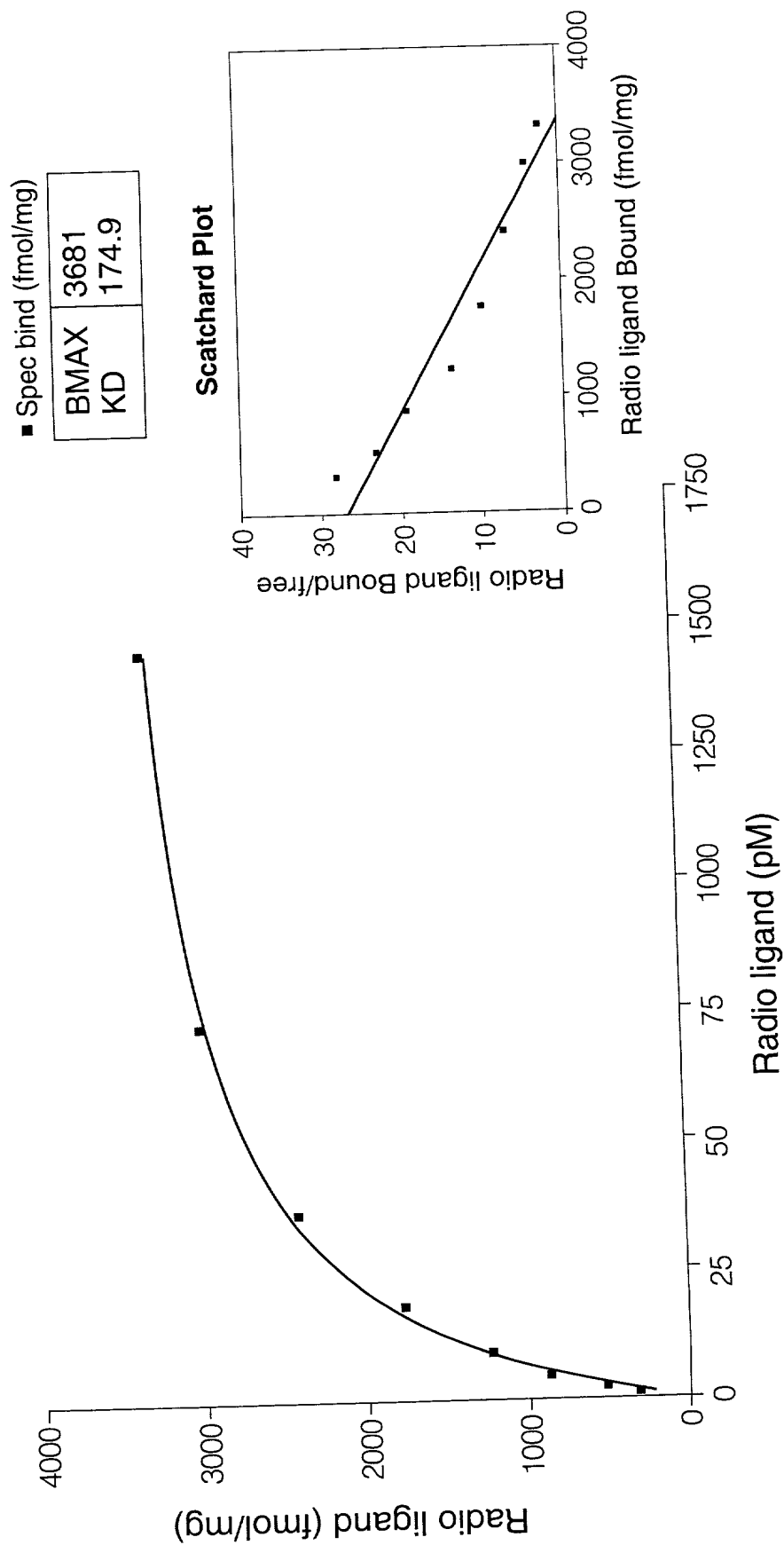


FIG. 9A

Membrane	IC50 (M)		Shu9119	JKC363
	ndp-MSH	MTII		
hMC4R	5.13E-10	3.95E-10	7.63E-11	1.31E-09
cMC4R	5.25E-10	4.01E-10	4.07E-11	9.71E-10
hMC3R	3.68E-10	2.48E-09	3.05E-10	1.51E-08

h=human
c=canine

FIG. 9B

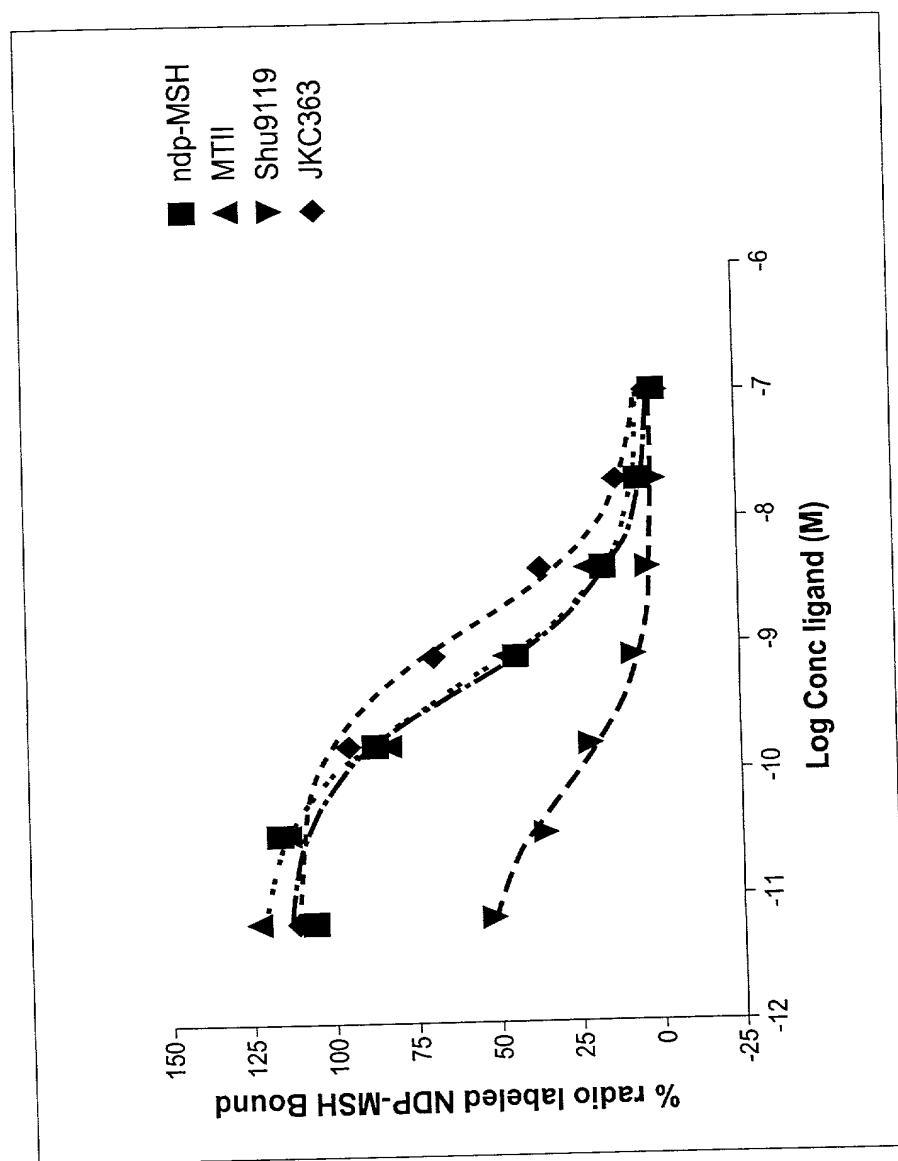


FIG. 9C

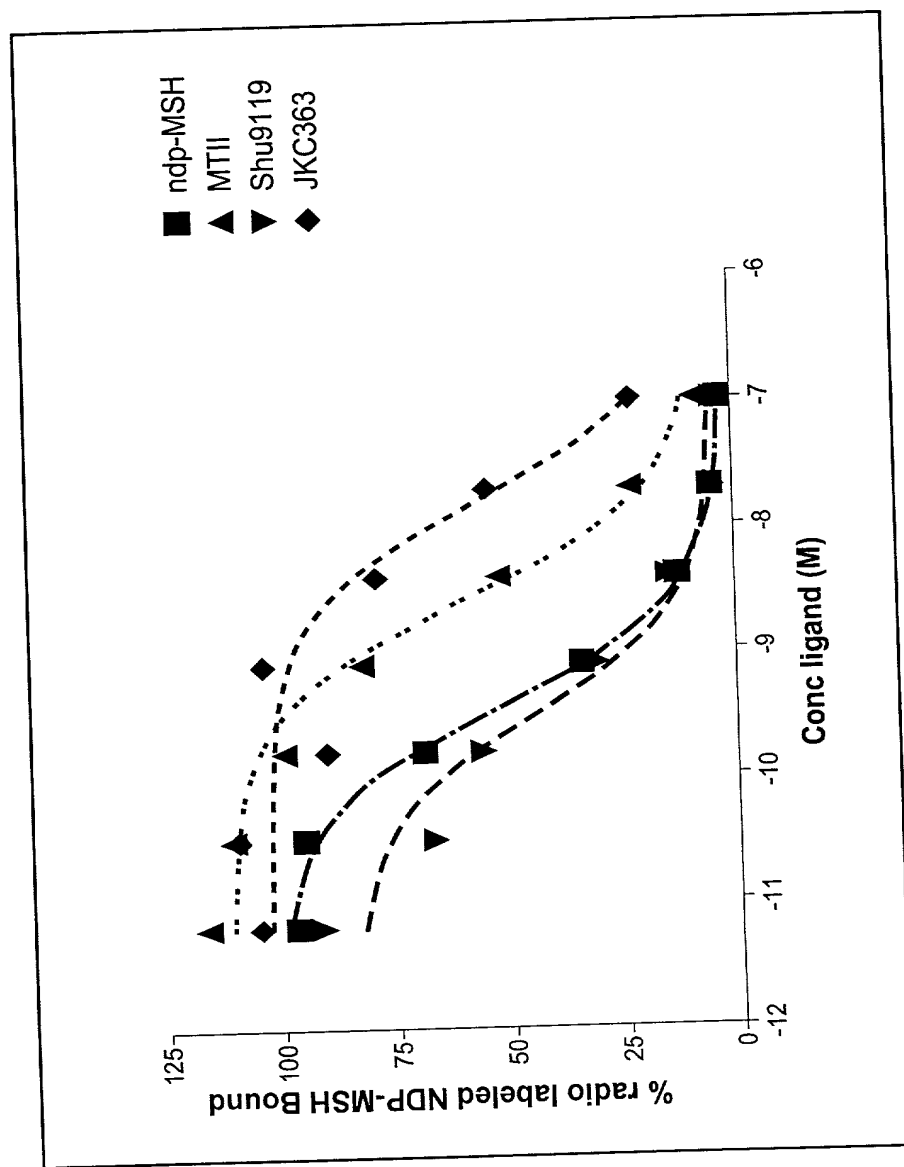


FIG. 9D

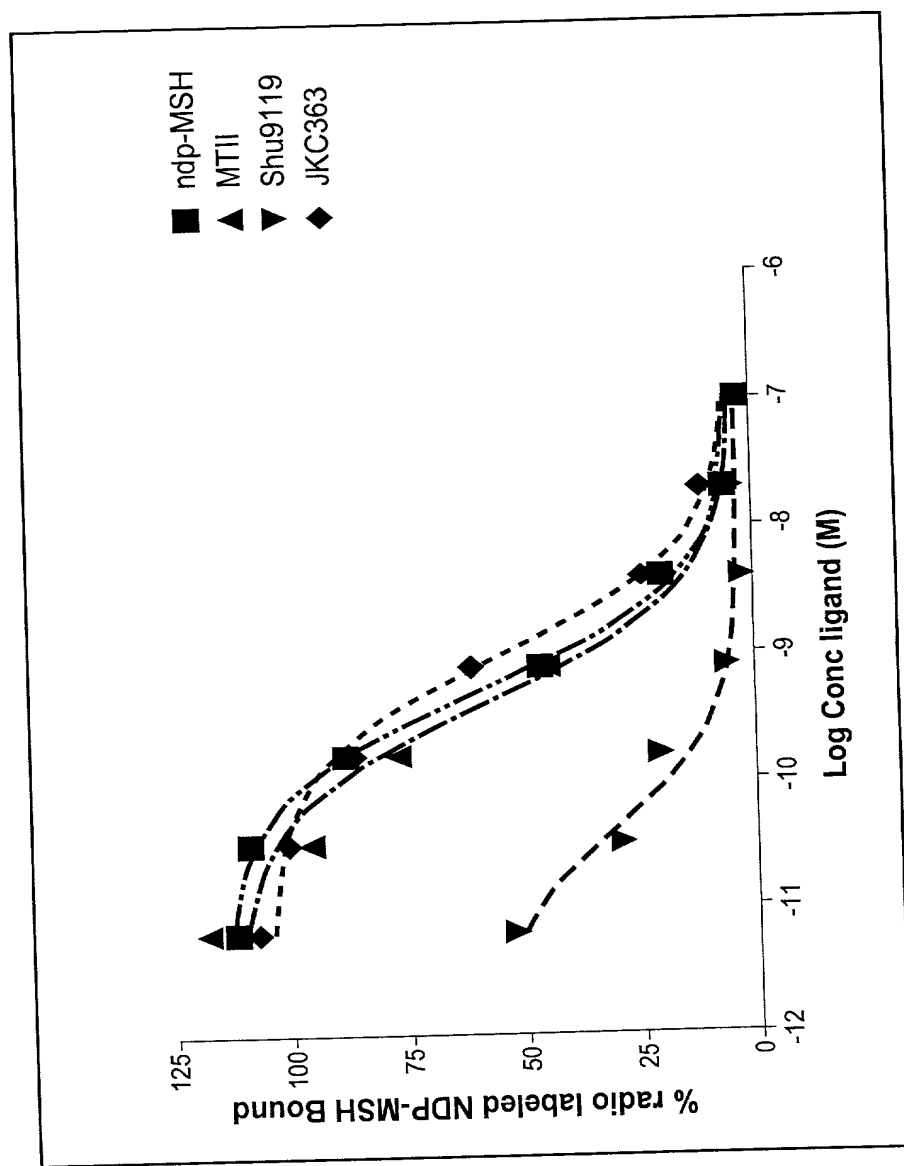


FIG. 10

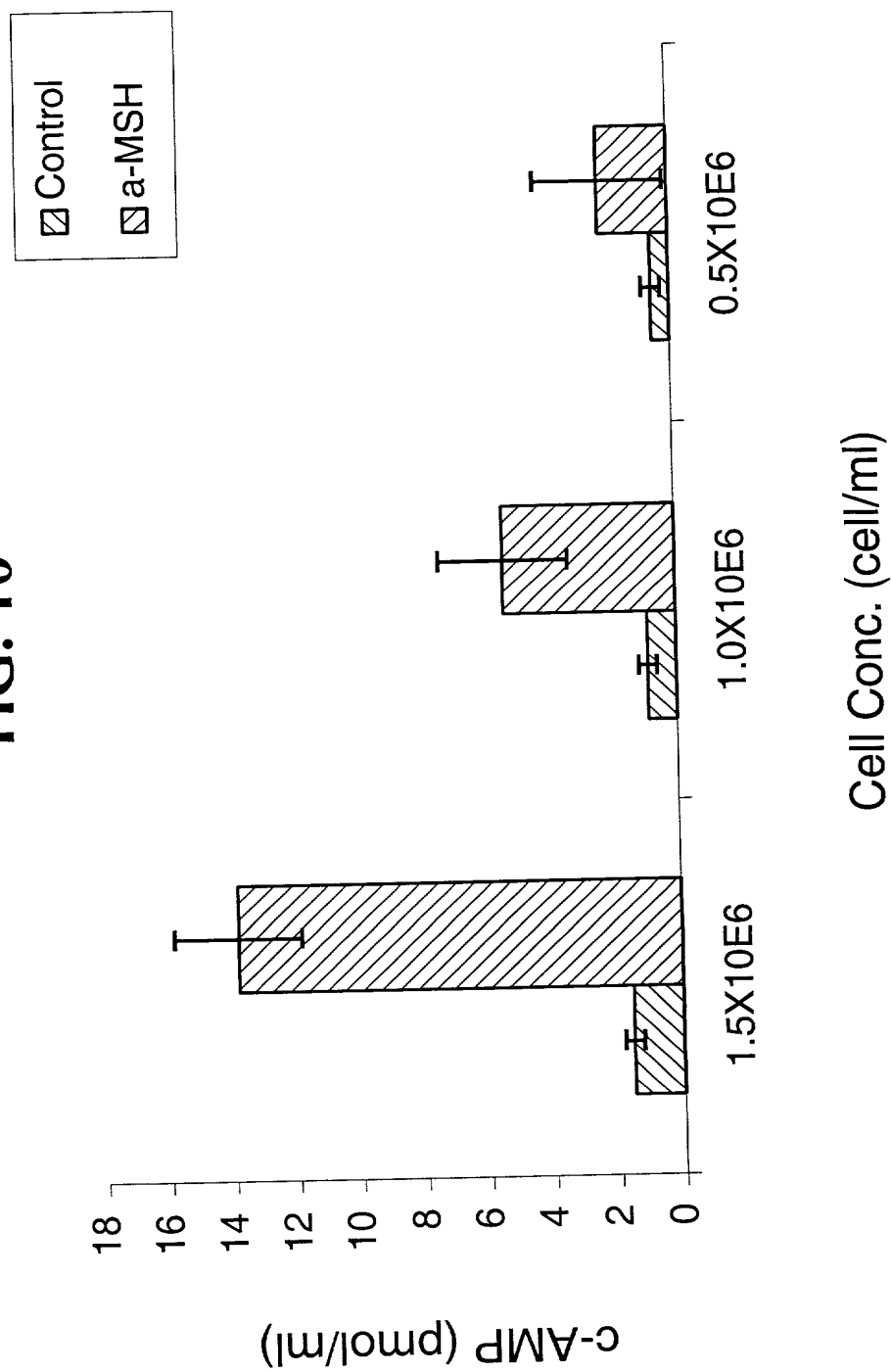


FIG. 11A

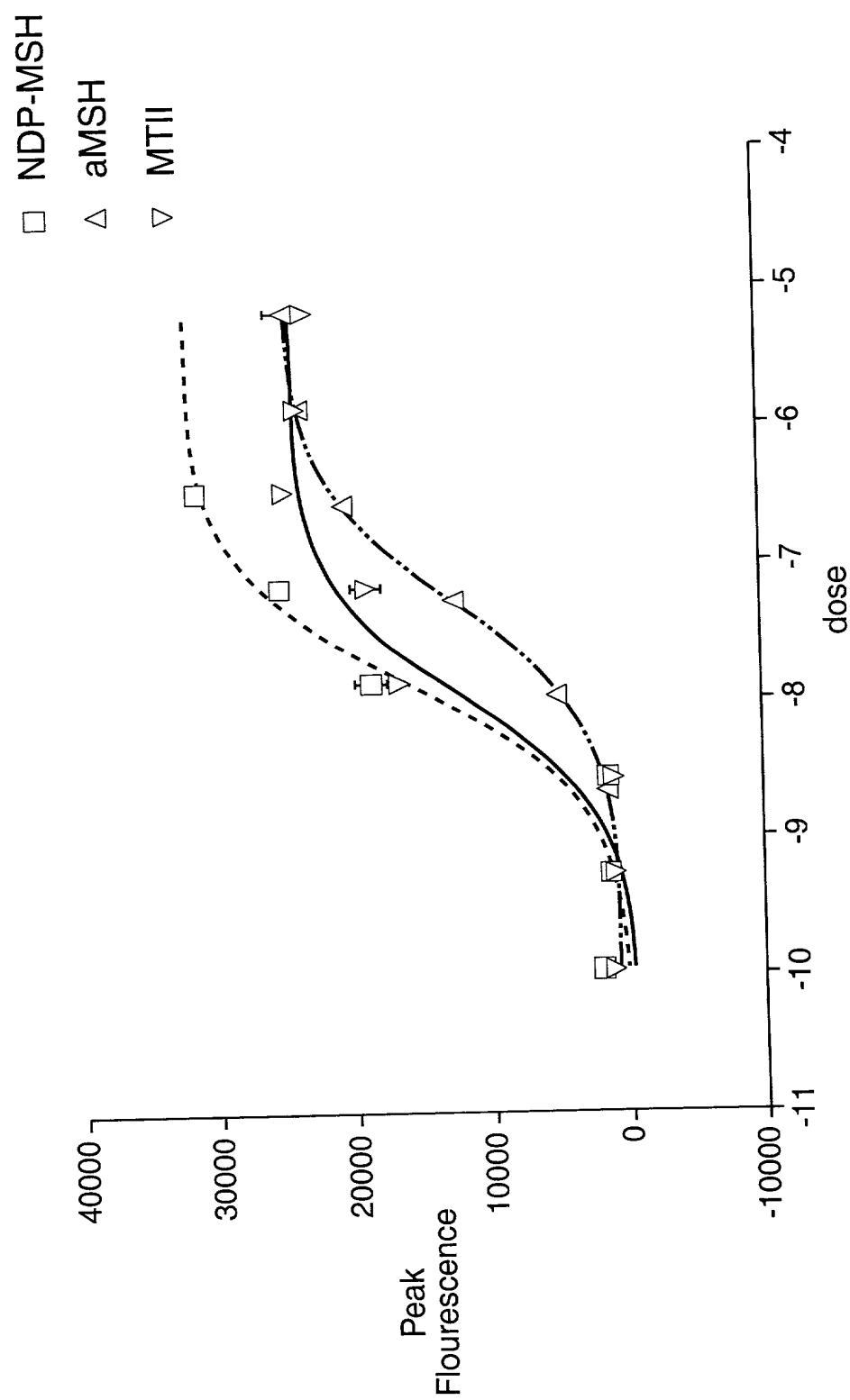


FIG. 11B

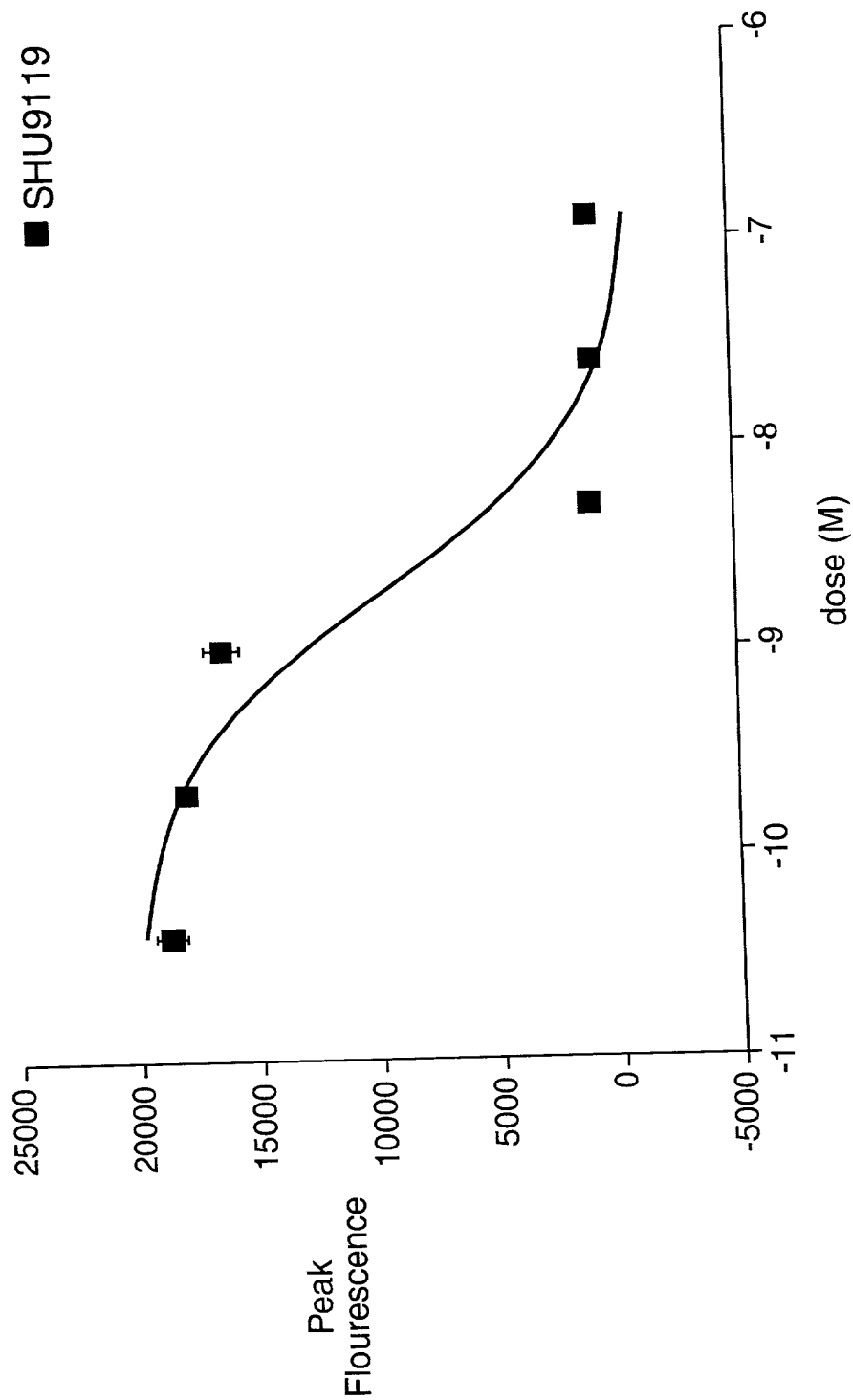




FIG. 12A

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FIG. 12A



FIG. 12B

gggcccgtttaaacccgctgatcagcctcgactgtgccttctagtgtccagccatctgtgtttgcccc
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FIG. 12C

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FIG. 12C



FIG. 13A

gacggatcgggagatctcccgateccctatggtcgactctcagtacaatctgctctgatgccgcatagttaagcc
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TGTAACAGAGGATGTACACCGGGTGCGTGGACGGCCCCGAGGGCA
GCAAGAAGGGCGCACGATCCCGACGCCTTTTCAGCCACTACACATG
TGCCACAGACACACAGAACATCCGCAAGGTCTTCAAGGACGTGCG
GGAATCGGTGCTCGCCCCGCTACCTGGACGAGATCAACCTGCTGTGA
CCCAGATCTAAAGCCGAATTCTGCAGATATCCATCACACTGGCGGCC
GCTCGAGCATGCATCTAGA

FIG. 13A



FIG. 13B

ctagagggcccgtttaaacccgctgatcagcctcgactgtgccttctagtgtccagccatctgttgttgc
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FIG. 13C

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